

Exploring Novel Catalysts for Sustainable Hydrogen Production in Inorganic Chemistry

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Abstract: *This research aims to investigate and develop innovative catalysts within the realm of inorganic chemistry for sustainable hydrogen production. The focus will be on understanding the catalytic mechanisms involved in hydrogen evolution reactions and designing materials with enhanced efficiency, stability, and selectivity. Experimental techniques such as X-ray crystallography, spectroscopy, and electrochemical analysis will be employed to characterise the synthesised catalysts. The ultimate goal is to contribute to the advancement of clean energy technologies by providing insights into the design and optimisation of inorganic catalysts for efficient hydrogen production*

Keywords: Catalysis, Hydrogen Production, Inorganic Chemistry, Catalyst Design, Sustainability, Clean Energy, X-ray Crystallography, Spectroscopy, and Electrochemical Analysis.